

## ABSTRACT

A flip chip assembly comprising a semiconductor die having a core area and a periphery area. The periphery area including an ESD structure. The semiconductor die includes at least one power conductor to supply power between the core area and the periphery. A substrate is coupled to the semiconductor die via a plurality of electrically conductive bumps. A first connection circuit is located within the semiconductor die core area to couple power between the substrate and the semiconductor die power conductor. An electrically conductive bump provides a connection between the first connection circuit and the substrate. The ESD structure is coupled to the first connection circuit.